SEQUENCE LISTING

(1) GENERAL INFORMATION:

   (i) APPLICANT: Millis, James R.
                Berry, Alan
                Burlingame, Richard

   (ii) TITLE OF INVENTION: PROCESS FOR PRODUCTION OF N-GLUCOSAMINE

  (iii) NUMBER OF SEQUENCES: 4

   (iv) CORRESPONDENCE ADDRESS:
       (A) ADDRESSEE: Sheridan Ross P.C.
       (B) STREET: 1560 Broadway, Suite 1200
       (C) CITY: Denver
       (D) STATE: CO
       (E) COUNTRY: USA
       (F) ZIP: 80202-5141

   (v) COMPUTER READABLE FORM:
       (A) MEDIUM TYPE: Floppy disk
       (B) COMPUTER: IBM PC compatible
       (C) OPERATING SYSTEM: PC-DOS/MS-DOS
       (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

   (vi) CURRENT APPLICATION DATA:
       (A) APPLICATION NUMBER: 09/341,600
       (B) FILING DATE: 1999-09-15
       (C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:
       (A) NAME: Connell, Gary J.
       (B) REGISTRATION NUMBER: 32,020
       (C) REFERENCE/DOCKET NUMBER: 3161-18-PUS

   (ix) TELECOMMUNICATION INFORMATION:
       (A) TELEPHONE: (303) 863-9700
       (B) TELEFAX: (303) 863-0223

(2) INFORMATION FOR SEQ ID NO:1:

   (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 29 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: single
       (D) TOPOLOGY: linear

   (ii) MOLECULE TYPE: other nucleic acid
       (A) DESCRIPTION: /desc = "primer"

   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

CGGTCTCCCA TGTGTGGAAT TGTTGGCGC   29

(2) INFORMATION FOR SEQ ID NO:2:

   (i) SEQUENCE CHARACTERISTICS:

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        (A) LENGTH: 34 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
        (A) DESCRIPTION: /desc = "primer"




    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

CTCTAGAGCG TTGATATTCA GTCAATTACA AACA                                    34

(2) INFORMATION FOR SEQ ID NO:3:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 20 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
        (A) DESCRIPTION: /desc = "primer"




    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

ATGGATGAGC AGACGATGGT                                                    20

(2) INFORMATION FOR SEQ ID NO:4:

    (i) SEQUENCE CHARACTERISTICS:
        (A) LENGTH: 19 base pairs
        (B) TYPE: nucleic acid
        (C) STRANDEDNESS: single
        (D) TOPOLOGY: linear

    (ii) MOLECULE TYPE: other nucleic acid
        (A) DESCRIPTION: /desc = "primer"




    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CCTCGAGGTC GACGGTATC                                                     19
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